



**MERSEN**  
*Expertise, our source of energy*



*25<sup>th</sup>*  
**ODDO BHF *Forum***  
FROM 6<sup>TH</sup> TO 11<sup>TH</sup> JANUARY 2022

# A **global player** at the heart of **technologies** who drives the industry forward and shapes a **more sustainable society**

## Key figures

€ 847m 2020 sales

€ 123m 2020 EBITDA  
14.5% of sales

6,400 employees

16 R&D centers

35 countries

## Commitments for sustainability

Sustainable development



**56%**

of sales linked to sustainable dvpt

Waste recycling



**60%**

Safety at work



**1.54**  
LTIR

Human capital richness



**91%**  
of employees proud to be part of the Group

Diversity



**35%**  
Women in the workforce

## Recognition



**MSCI**  
ESG RATINGS



CCC B BB BBB **A** AA AAA

# What makes Mersen unique?



## Expertise

**Advanced  
Materials**

**Electrical Power**

Efficient innovation

## Competitive differentiation

**High barriers of entry** (graphite formulation, electrical regulations and standard)

**Customized products** (>65%)

**Global footprint**

## Positioned on attractive markets

**Sustainable development markets** (Renewable energies, Electronics and green Transportation)

**Highly buoyant markets:**  
SiC semicon, EV, Solar

## Excellence to drive cash-flow

**Solid balance sheet and cash generation**

High gross margin

**Lean culture deployment**

CSR commitments for overall improvement

**#1 or 2 on each activity with c. 15-30% market share**

# Advanced Materials: High value-added customized solutions relying on a unique materials expertise

## Anticorrosion Equipment N° 1-2 Worldwide



Engineering systems



Columns, reactors and pressure vessels



Heat exchangers



## Graphite Specialties N° 1-2 Worldwide



Laser galvo scanning mirrors in Sintered SiC



Wafers carrier in ultra pure graphite for Semicon

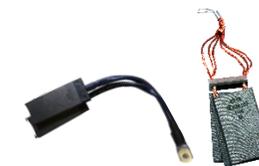


Ultra pure graphite electrodes for polysilicon production



Carbon insulation for high temperature furnaces

## Power Transfer Technologies N° 1-2 Worldwide



Brushes and brush holders



Slip-rings



Total Monitoring & DustCollector



Lubricating sticks & applicators for wheel/rail contact

Competitors

*SGL Carbon (Ger)*

*SGL Carbon (Ger), Tokai Carbon (Jp),  
Toyo Tanso (Jp), Schunk (Ger)*

*Morgan Advanced Materials (UK), Schunk (Ger)*

# Electrical Power: A **unique portfolio** serving **two key applications**



## Electrical Protection N° 2 Worldwide in industrial fuses



Fuses and fuse holders

Surge protection devices

Coverage of all standards worldwide: UL, IEC, DIN, etc.

*Competitors: Eaton(US), Littelfuse (US)*

## Power Conversion N° 2 Worldwide (components)



Fuses for semiconductors

Busbars

Cooling devices

Capacitors

Only customized offering of **bundled passive components** on the market

*Competitors: Eaton (US), Rogers (US), Methode (US), Lytron (US), Cornell Dubilier (US), Panasonic (Jp)*

# A global footprint to **maximize** customer intimacy



Situation as of December 2020

# Prestigious and exacting customers



	PROCESS INDUSTRIES	CHEMICALS	TRANSPORTATION	ELECTRONICS	ENERGY
> 65% customized products	 		 	 	 
Replacement market 65% of sales	 	 	  	 	 
Largest client ~3% of sales			 	 	 
Longstanding ties	 		 		 

# A longstanding sustainability strategy



2010

Set-up of a sustainability report

Formalization of longstanding practices

Corporate governance improvements

2018

Sustainability Materiality matrix

Sustainability roadmap and mid-term targets on:

- Ecological transition
- Waste
- Supply chain
- Health & Safety
- Outreach
- Diversity
- Training

2021

New non financial objectives on:

- Climate change
- Diversity in senior management

2022

Update of Sustainability materiality matrix

New mid-term roadmap

# A recognized commitment and improvement for **all stakeholders**



from **BBB** in **October 2019**  
to **A** in **2021**



2020: first year to disclose on Climate Change  
and Water Security  
2021: **C** rating on **Climate Change**



from **Bronze** in **Feb. 2020**  
to **Silver** in **Aug. 2020**  
And **Gold** in **July 2021**



WE SUPPORT

**Signatory since 2009**  
**Advanced scope status since 2021**



# 2021 guidance revised upwards



1<sup>st</sup> guidance revised in early July based on trends observed in H1

**2<sup>nd</sup> revision at the end of October for the current operating margin, based on favorable product-mix**

Original guidance Organic sales growth of between 2% and 6%

Revision 1 Organic sales growth of between 6% and 8%

**Revision 2 Organic sales growth at the upper end of the guidance range**

Original guidance: Operating margin before non-recurring items of between 8% and 8.8%

Revision 1 Operating margin before non-recurring items of between 9.2% and 9.6%

**Revision 2 Operating margin before non-recurring items slightly higher than guidance**

Original guidance Capex between €70m and €80m

**Revision Capex at the upper range of the guidance range**

# 01

## Our growth markets



AUTONOMOUS

SAFE  
1G\*2 +  
TT: F004

SENSOR  
ACTIVE  
INT\*3 +  
TTS SENSOR GROUP 3-TZ

8E.0

7A

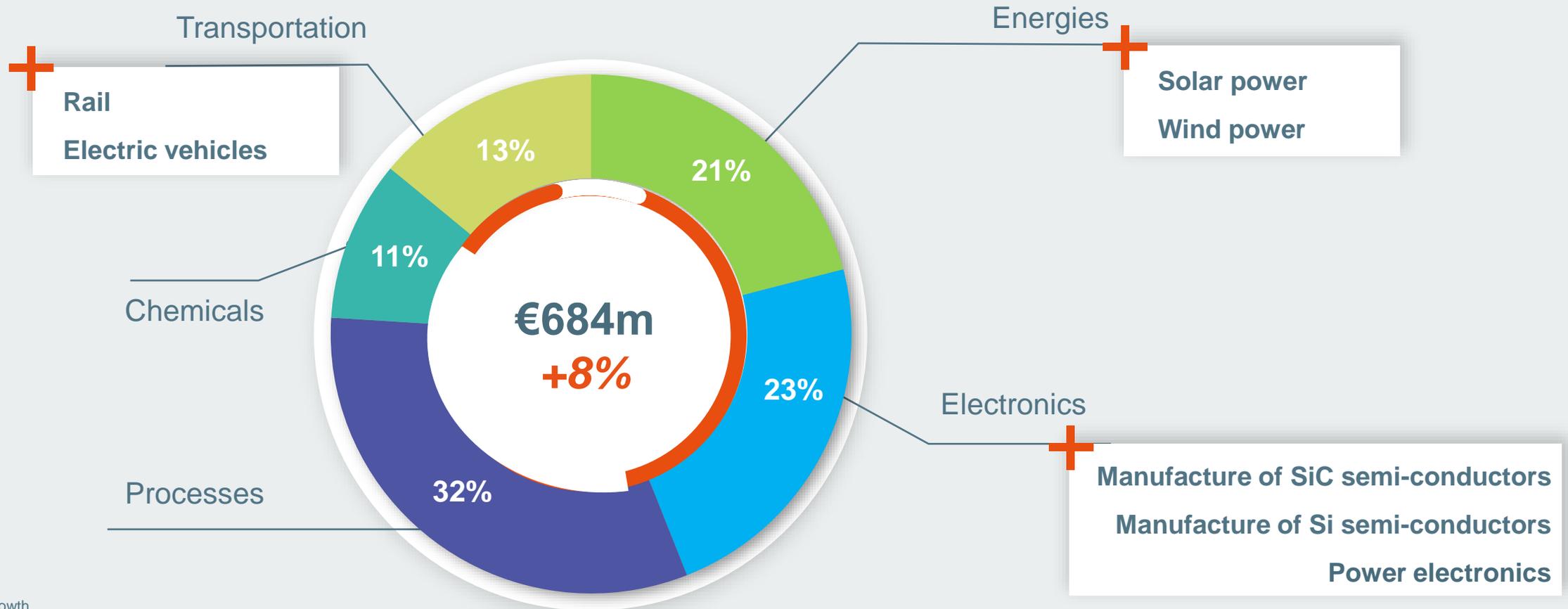
# Strong First-Half performance, trends confirmed over 9 months



		2021 Original forecasts	2021 New forecasts	9 months
Energy	+ Solar power	↗ ↗	↗ ↗	↗ ↗
	+ Wind power	→	→ ↗	→
	Conventional energy	→	→	→
Electronics	+ Manufacture of SiC semi-conductors	↗ ↗	↗ ↗ ↗	↗ ↗ ↗
	+ Manufacture of Si semi-conductors	→ ↗	↗	↗
	+ Power electronics	→ ↗	↗	↗ ↗
Transportation	+ Rail	→	→ ↘	↘ ↘
	Aeronautics	↘ ↘	↘ ↘	↘ ↘
	+ Electric vehicles	→	↗ ↗	↗ ↗
Chemicals	Corrosive chemicals	→	→ ↘	→ ↘
Processes	Metallurgy Heat treatment Ceramics Glass, ...	↗ ? ↗ ↗	↗ ↗	↗ ↗

# Sustainable development markets are propelling growth

Sales linked to sustainable development markets  
**+10.5%\* vs 9m 2020**

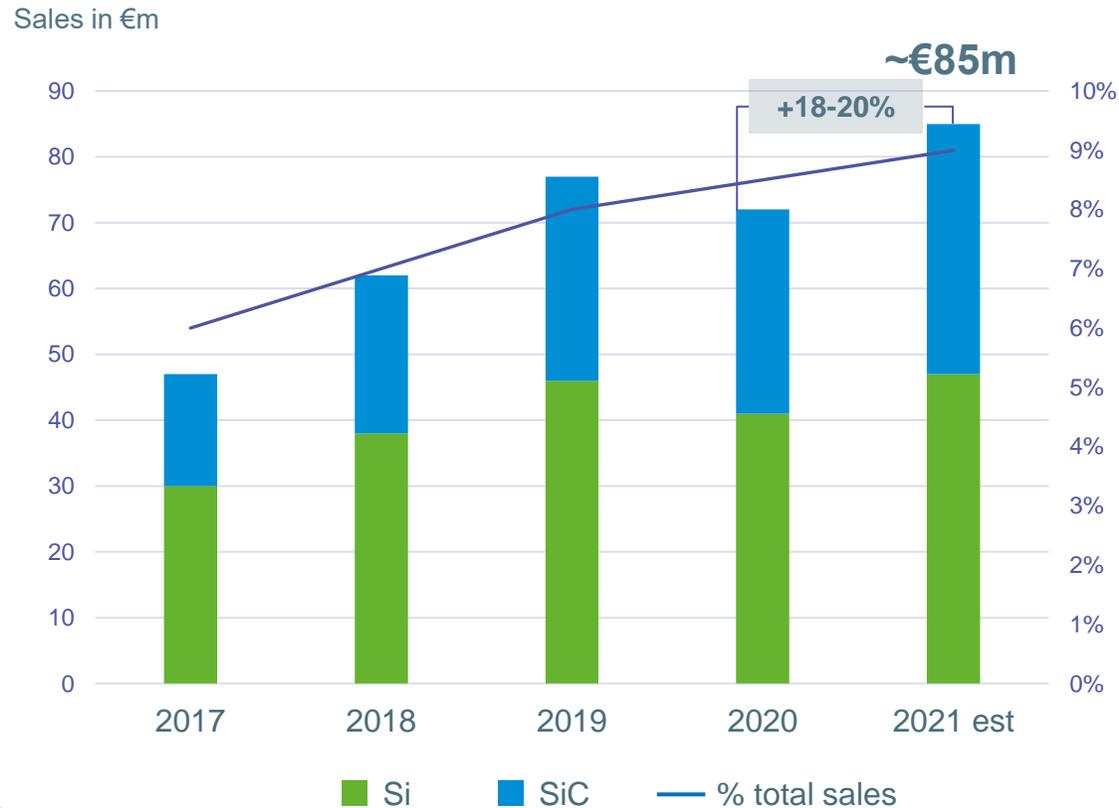


\* Organic growth

# Semiconductors: A growing share of Mersen's business



## INCREASING SALES CONTRIBUTION



## DRIVEN BY TARGETED CAPEX (2017-2021)

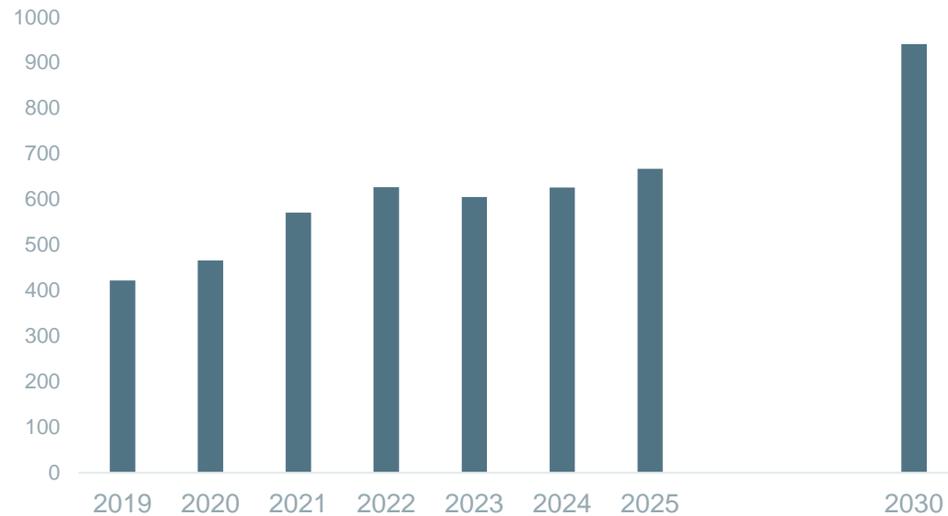


# The semiconductor market will see **significant growth** through 2030



## SEMICONDUCTOR MARKET (\$BN)

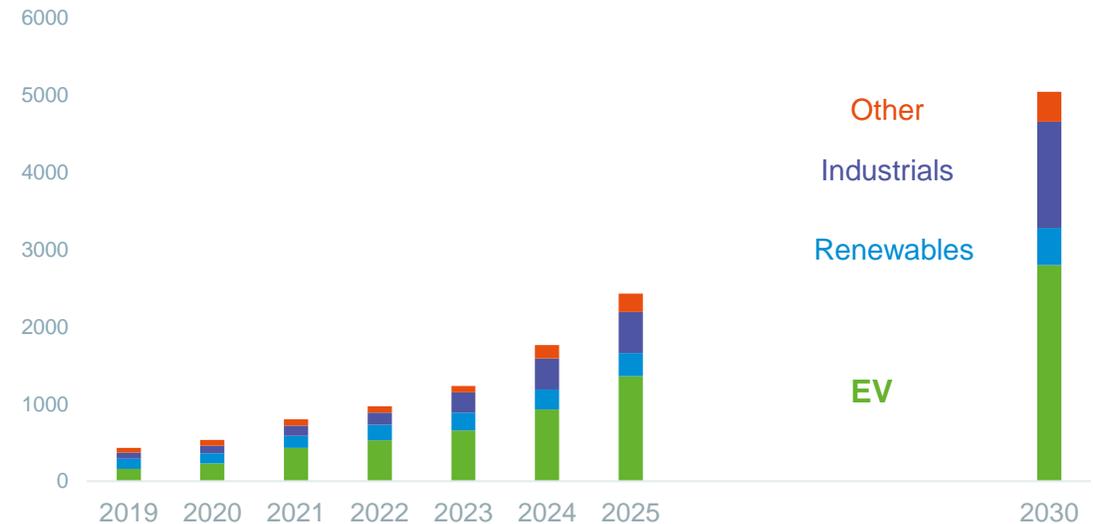
**CAGR 2021-2030  
+6%**



Source: ASML, sept 21

## SIC COMPONENT MARKET (\$M)

**CAGR 2021-2030  
+23%**



Source: Yole → 2025, Exawatt for EV and Mersen estimates

## Strategic partnership with Soitec

The Mersen logo features the word "MERSEN" in a bold, sans-serif font. The letters "M", "E", "R", and "S" are in blue, while "E", "N", and "E" are in orange. The letter "N" is stylized with a vertical line extending downwards.The Soitec logo features the word "soitec" in a lowercase, sans-serif font. The "s" is blue, "o" is orange, "i" is blue, "t" is blue, "e" is orange, and "c" is blue. A stylized leaf-like shape is integrated into the "o".

Strategic partnership to develop  
a new range of **PolySiC**  
substrates for the EV market

Soitec and Mersen teams  
leverage **CEA-Leti Substrate  
innovation center** to validate  
progress towards  
industrialization

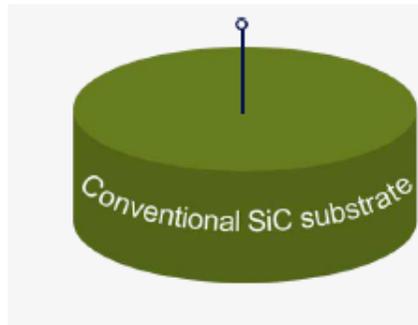
VERY LOW ELECTRIC RESISTIVITY  
POLYSIC SUBSTRATES  
WILL ENABLE **HIGHER ENERGY  
EFFICIENCY**, FOSTERING  
THE DEVELOPMENT  
OF **MORE ENERGY-EFFICIENT  
ELECTRIC VEHICLES**

# Traditional SiC vs SmartSiC™

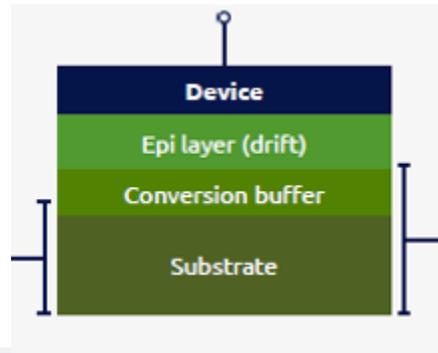


## Mersen in the process

### TRADITIONAL PVT PROCESS (SiC monocrystalline)

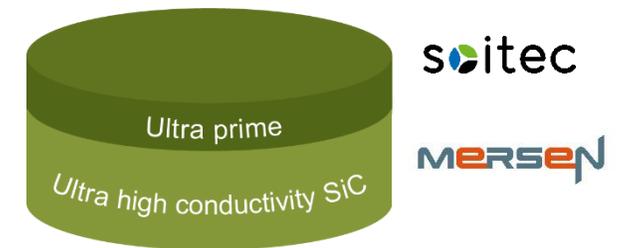


### FINAL SiC POWER DEVICE



## Mersen now in the device

### SOITEC SMARTSiC™ ON POLY-SiC PRODUCT



**COST**



High



Low  
(CVD + SmartCut)

**DOPING**

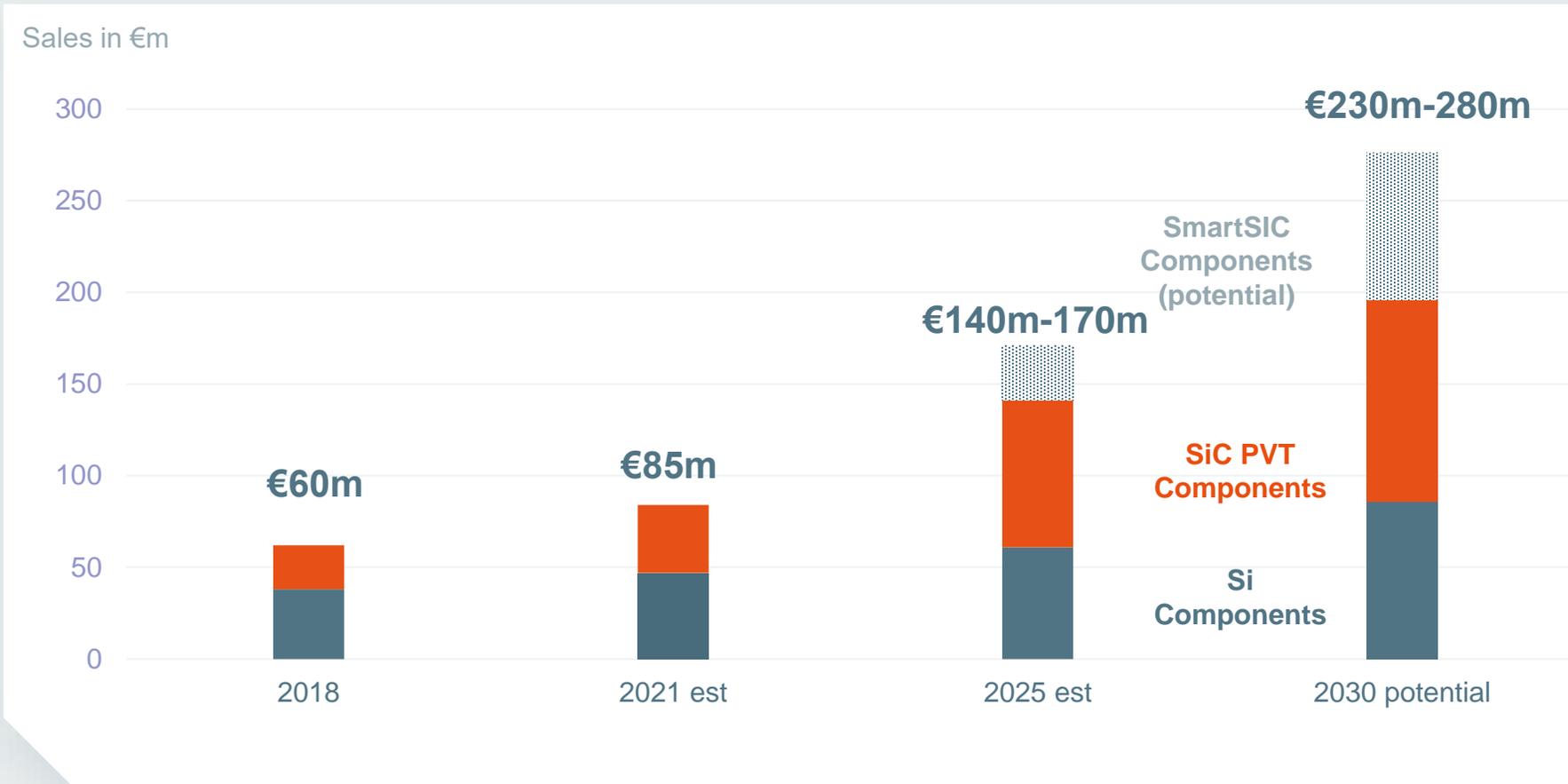


Limited  
by technology



High  
to reduce resistivity

# Mersen's medium-term potential in semiconductors



~25-30%  
EBITDA margin

Capex €8m-12m/  
year  
(excl. SmartSIC)

SmartSIC Capex  
under review

# EV: **major** steps forward



## RELATIONS WITH

- Traditional car manufacturers
- New players
- Tier-one suppliers for manufacturers
- Battery manufacturers



## PARTNER OF THE AUTOMOTIVE INDUSTRY

- Contract with Marquardt, production to start-up in 2022
- Strategic partnership with Autoliv (target: vehicles over 800V)



2021

- 9 months sales **€12m**
- Strong growth (>+20%)



MID-TERM ANNUAL REVENUE

**€40-70M**

# Solar power: significant potential for Mersen by focusing on premium quality



## A GROWING MARKET

- Expected installations in 2021: 145 GW
- Mid-term growth: 15% on average/year



## TRUSTED RELATIONS WITH CUSTOMERS across the whole value chain

- Solar cell manufacturers:
  - Jinko, Longi, Zhonghuang
  - New Chinese entrants
- Inverters
  - TMEIC
  - Power Electronics
  - Fronius



## CONTINUED TECHNICAL INNOVATIONS

- Increasing the size of cells for more yield
- Local insulation and composite offerings (Mersen Galaxy)



2021

- 9m sales: **€53m**
- Strong growth (up by >15%)



MID-TERM ANNUAL REVENUE

**€100M**

# Continued optimization of the manufacturing base to prepare for the future



## Semiconductor market

- Project for a new extended plant in South Korea

## Electric vehicle market

- Strengthened dedicated team
- Large-scale production of EV fuses in China and Mexico

## Columbia (USA)

- Start-up of the GRI insulation line (Americarb)
- Start-up of extruded graphite production (process industries)



## Operating efficiency of EP segment

- European production of DIN-standard fuse switch disconnectors grouped at the Fusetech site in Hungary (closure of the Czech Republic plant)

- Transfer of production of surge protection products from Guangzhou to the new ChangXing site that opened in 2020 in China

## Information Systems

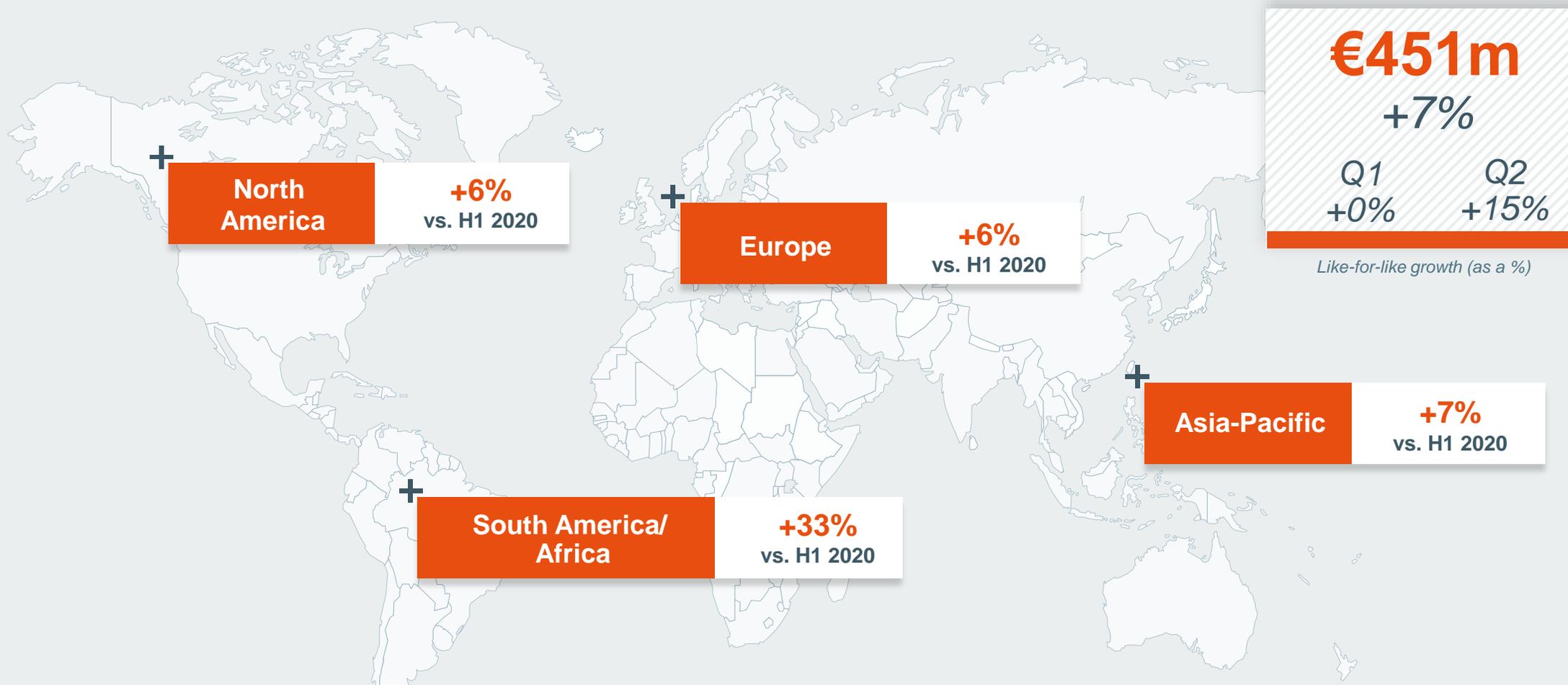
- New Group ERP version
- *Customer Relationship Management (CRM)*
- *Manufacturing Execution System (MES)*
- Process digitalization



**02**

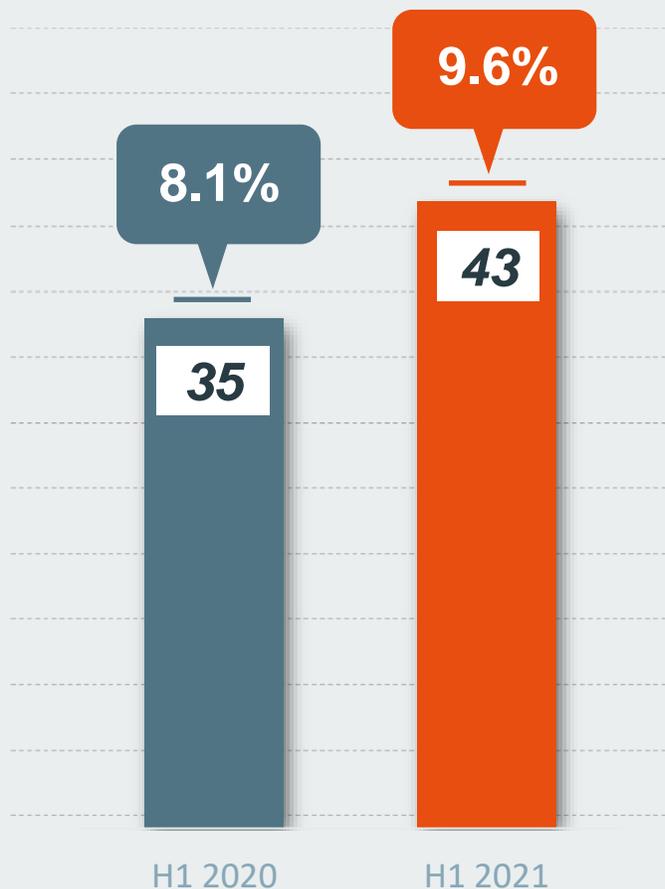
**First-half  
2021 results**

# Return to growth in H1 2021, with an acceleration in the 2<sup>nd</sup> quarter



# Significant increase in profitability

Operating margin before non-recurring items (% of sales)  
 Operating income before non-recurring items (€m)



H1 2020 operating margin before non-recurring items

8.1%

Volume/mix effects	+2.1
Structural savings (adaptation plan)	+1.1
Net temporary savings	-0.2
Productivity gains	+1.0
Cost inflation	-0.9
Raw material effect (net of prices)	-0.5
Bonus, profit-sharing	-0.6
Depreciation, fx, scope	-0.5

H1 2021 operating margin before non-recurring items

9.6%

**H1 2021 EBITDA**  
**€71m**  
**15.7% of sales**

H1 2020 EBITDA  
 €62m  
 14.4% of sales

# Structural and temporary impacts



## Structural savings (Adaptation plan)

<i>millions d'€</i>	2020	H1 2021	FY 2021	2022	Total
Restructuring cost (P&L)	17	2	5		22
Expected savings compared with the 2019 cost structure		4	10	16	16/y
Cash-out	5	5	10	7	22

Plan on track (costs, savings)  
Postponement of some cash payments to 2022

## Temporary Impacts (Covid crisis)

H1 2021 vs H1 2020

- Reduction in travel expenses, Trade shows, ...
- Non-renewal of Covid-related financial aids
- Additional costs from Covid not renewed in part

**Net impact : -€1m**

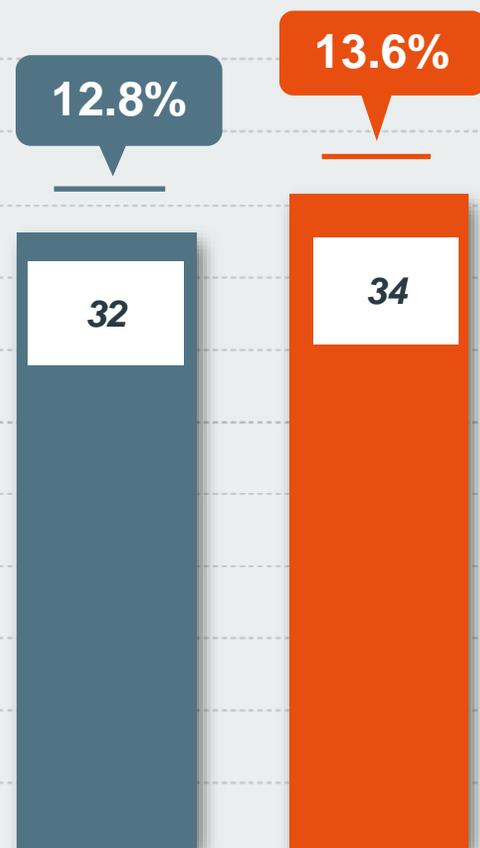
Out of Covid context

Return of travel and marketing expenses mostly offset by expected savings from the adaptation plan

# Both of the Group's segments contributed to **profitability growth**

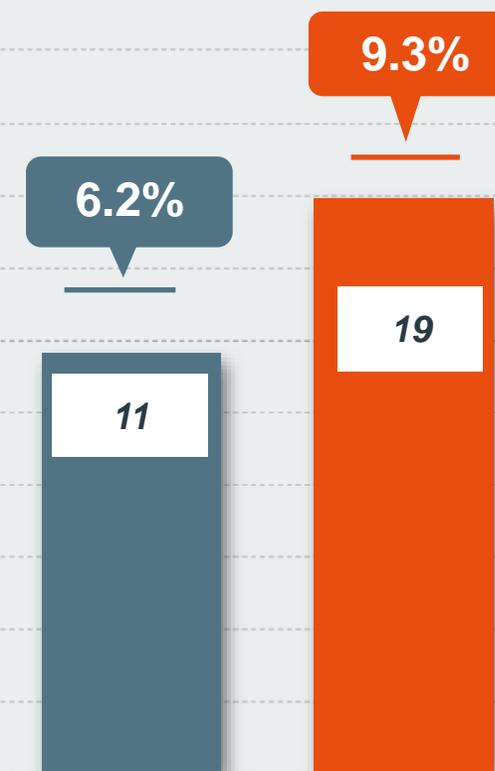
Operating margin before non-recurring items (% of sales)  
*Operating income before non-recurring items (€m)*

## Advanced Materials



- **AM segment**
  - Slight positive volume effect
  - Positive effect of adaptation plan
- **EP segment**
  - Important positive volume effect
  - Favourable mix effect
  - Positive effect of adaptation plan
  - Negative raw materials impact partially offset by price increase

## Electrical Power



H1 2020

H1 2021

H1 2020

H1 2021

# Net income up by more than 50%

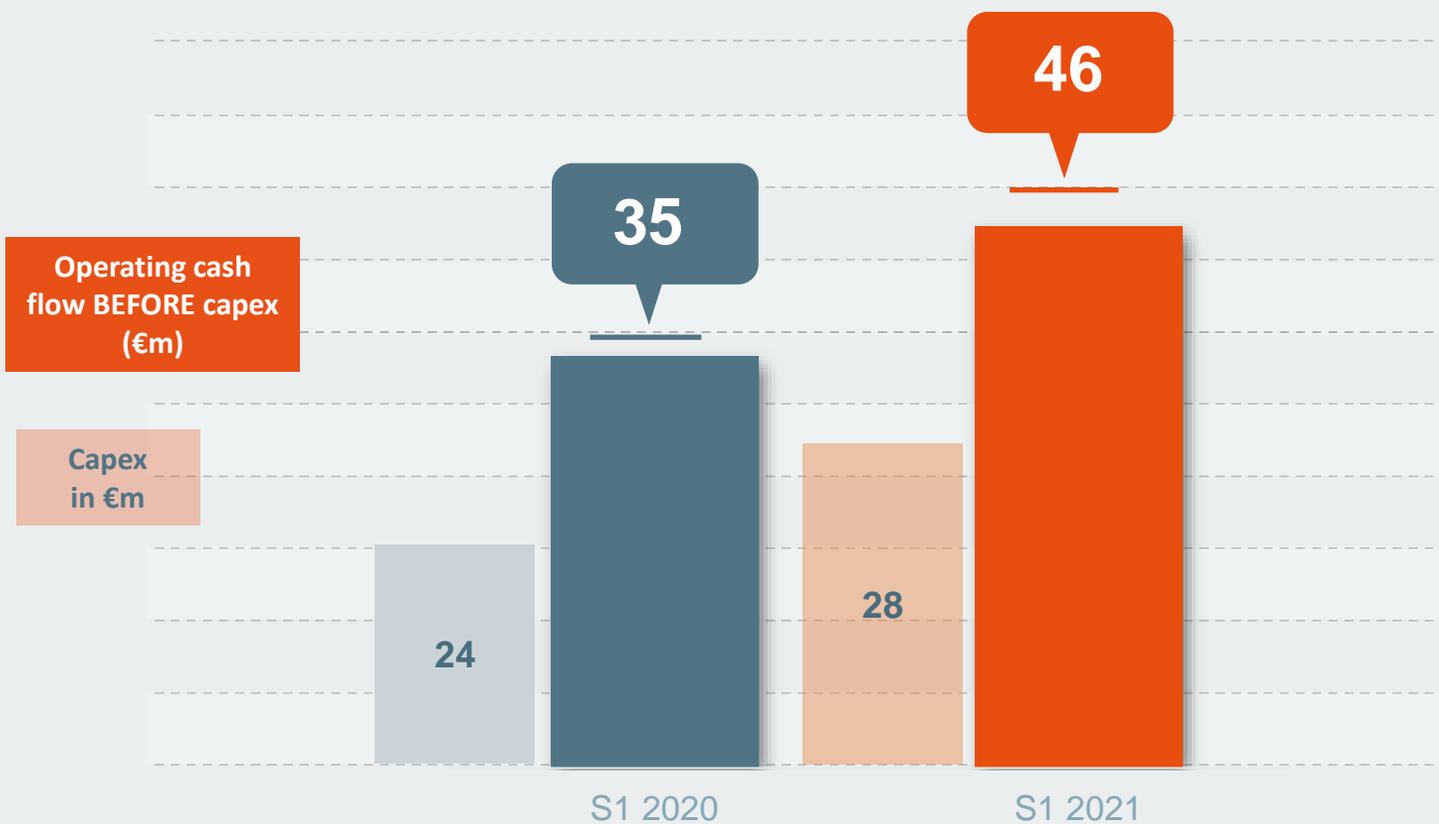


In €m	H1 2020	H1 2021
<b>Operating income before non-recurring items</b>	<b>34.7</b>	<b>43.3</b>
Non-recurring income and expenses	(4.9)	(1.6)
Net financial expense	(6.1)	(5.6)
Income tax	(5.9)	(9.0)
<b>Net income</b>	<b>17.8</b>	<b>27.1</b>
Attributable to owners of the parent	16.3	25.5

**Non-recurring expenses**  
*Mainly Columbia (USA),  
 restructuring costs partly offset by  
 favorable dispute settlements*

**Effective tax rate: 25%**  
*the same as in H1 2020*

# Higher operating cash flow generation



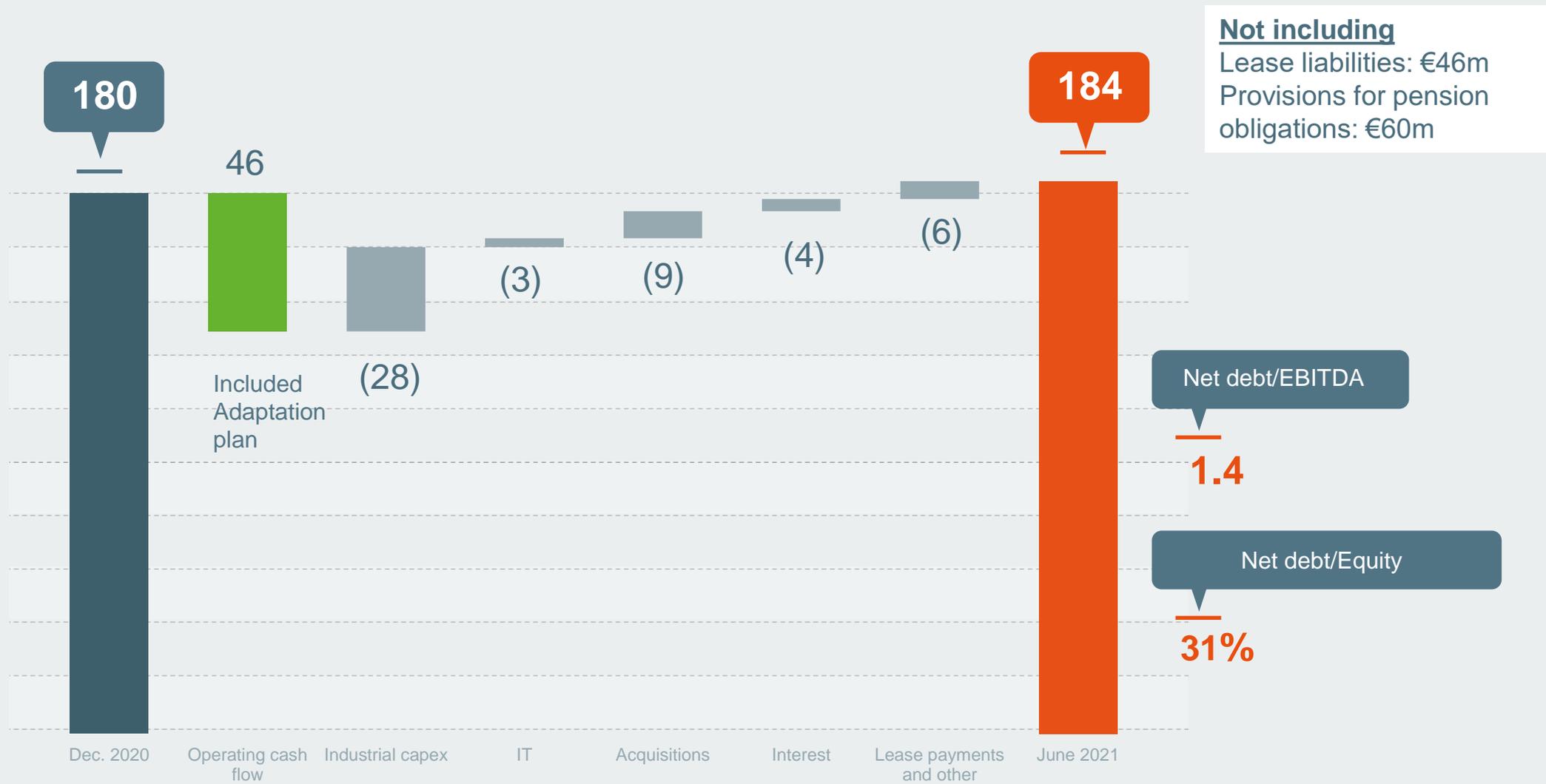
  
**Cash flow conversion\***  
**65%**

**Funding for capex**  
**€28m**

  
**WCR 20% of sales**  
(28% in H1 2020)

\* Operating cash flow before capex/EBITDA

# Stable net debt, enabling the Group to finance its future growth

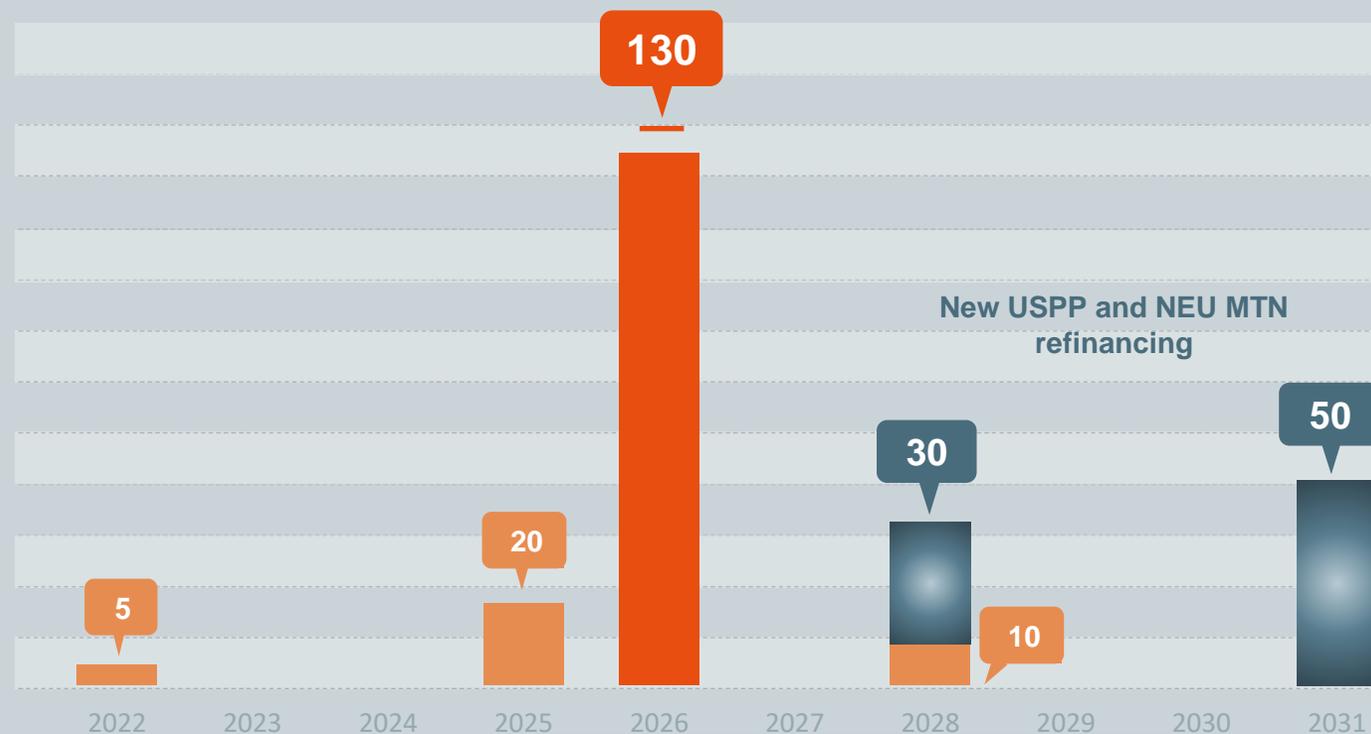


# A solid balance sheet with average debt maturity raised to 6 years\* after the new USPP

MATURITY SCHEDULE OF CONFIRMED FACILITIES DRAWN DOWN AT DECEMBER 31, 2020 (IN €M)



LARGE REFINANCING IN 2021 INCLUDING A NEW USPP (IN €M) AT NOVEMBER 30, 2021



UNDRAWN COMMITTED FACILITIES (MATURING IN 2024)

**€220M**

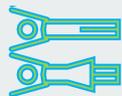
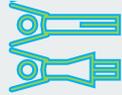
\*based on utilization on committed credit lines

An aerial photograph of a mangrove forest, showing dense green vegetation and a network of winding water channels. The water is a light blue-green color, and the land is a vibrant green. The channels meander through the forest, creating a complex pattern. The overall scene is a healthy, natural ecosystem.

# **Road-map Governance and KPI on sustainability**

# A strong commitment to **social responsibility**



		Target 2021 (defined in 2018)	Estimated for 2021
 <b>PLANET</b>	<b>ECOLOGICAL TRANSITION</b> % of sales to sustainable dvpt	55%	
	<b>CLIMATE CHANGE</b> Intensity of GHG emissions (scopes 1 & 2)	- 20% by 2025 compared with 2018	<i>N/M. Target set up early 2021</i>
	<b>WASTE</b> Industrial waste recycling rate	+15-points	
	 <b>SUSTAINABLE SUPPLY CHAIN</b> Evaluation of suppliers	Evaluate our strategic suppliers	Late because of Covid period
 <b>PEOPLE</b>	<b>HEALTH &amp; SAFETY</b> LTIR, SIR, Safety visits	+15% in the number of safety visits LTIR ≤1.40 and SIR ≤60 in 2021	
	<b>OUTREACH</b> Human potential success rate	+3 point	
	<b>DIVERSITY</b> % women managers & executives	25% to 30% by 2022	
	 <b>TRAINING</b> % managers trained to Open Manager	100%	

# CSR Governance



BOARD OF DIRECTORS

CSR Strategy review

AUDIT & ACCOUNT COMMITTEE  
OF THE BOARD

CSR Risk analysis review

*Magali Joessel, permanent representative of Bpi, designated responsible for monitoring CSR issues*

EXECUTIVE COMMITTEE Promotes the Group's CSR strategy and implements it.

HSE committee

CEO

HR

Operational  
Excellence

Businesses

CSR committee

CEO

HR

CFO

Operational  
Excellence

Compliance

Compliance  
Committee

CEO

HR

CFO

Compliance

# Values & Ethics **shared** by all employees



Available in 14 languages



## ■ Governance

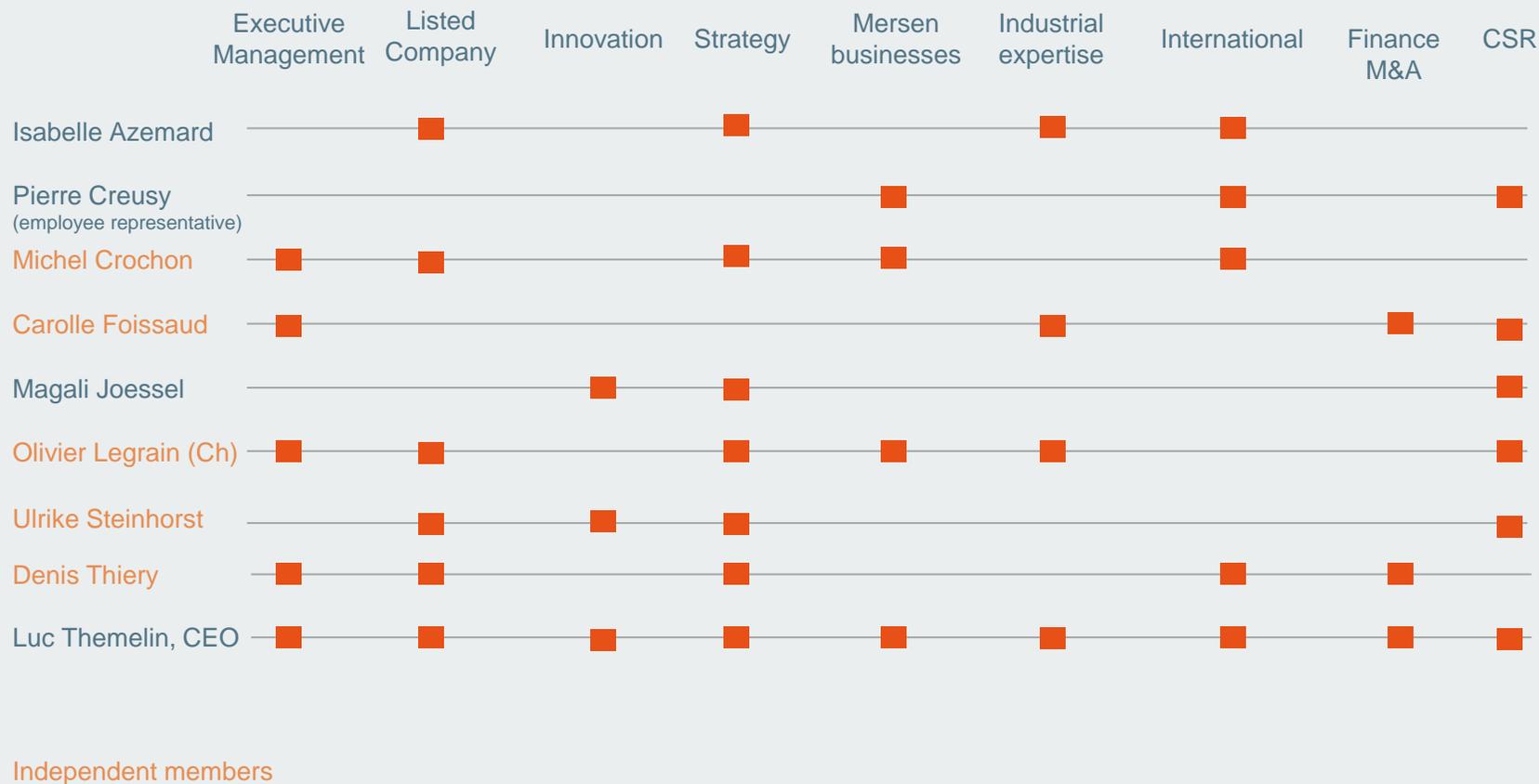
- Chief Compliance Officer reporting to the Audit & Account committee
- Quarterly Ethics & Compliance committee chaired by the CEO
- Whistleblowing system (global and local – France, China, USA)

## ■ Training programs

- Ethics: for all employees
- Anti-corruption: for the positions concerned (management, sales, procurement, finance)

## ■ Compliance is part of the review of internal control.

# High quality board of directors

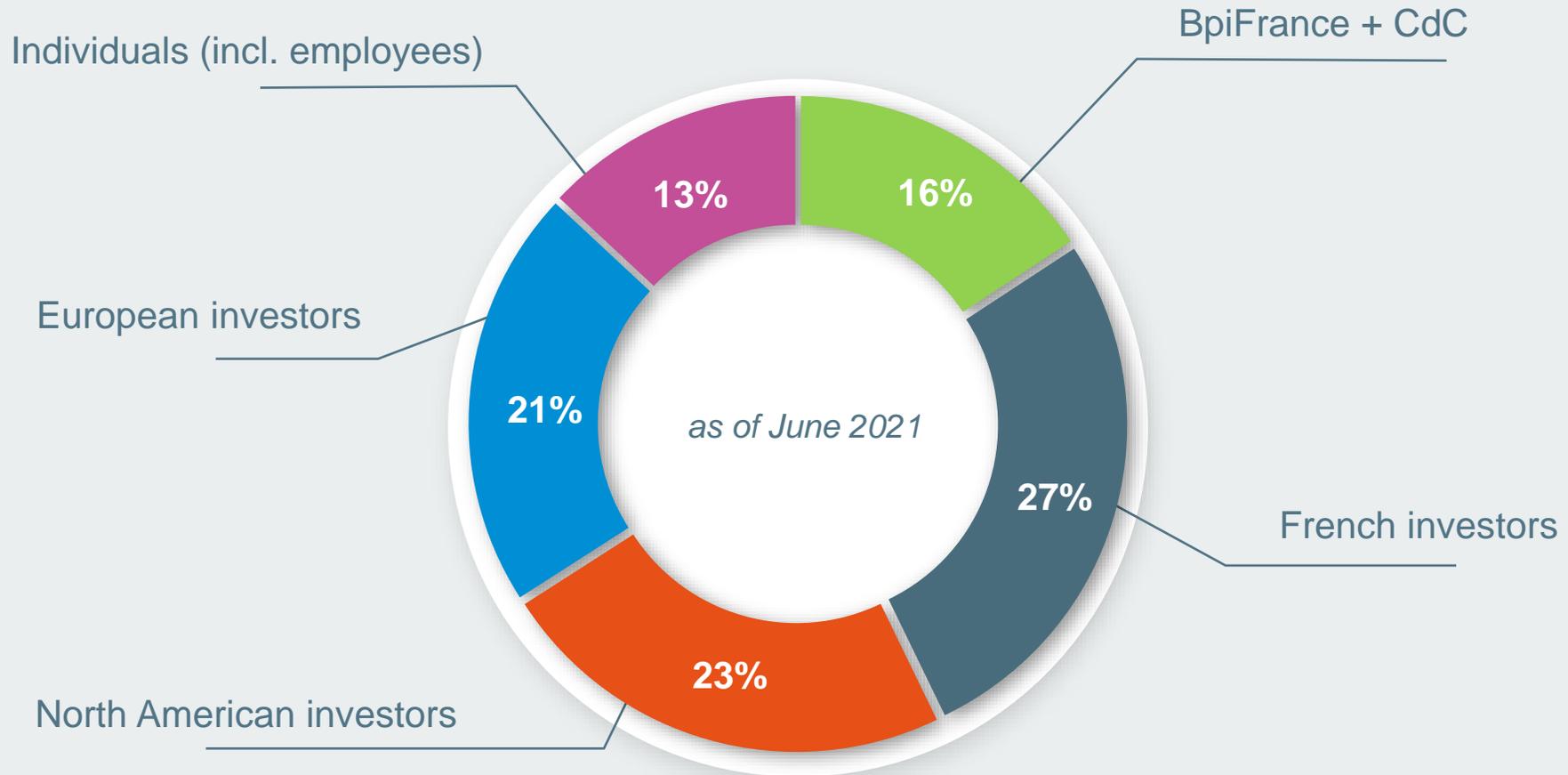


62% independent

50% women

97%  
attendance rate in 2020  
(11 meetings)

# Diversified shareholding base



# Key KPI on Environment (2020 results\*)



**40%**

Ratio of certified plants in 2020 (39% in 2019)

ISO 14001 Certification  
+1% versus 2019



**289k**

Tons CO<sub>2</sub> equivalent in 2020 (370k in 2019)

Greenhouse Gas Emissions  
-22% versus 2019



**60%**

Recycled wastes in 2020 (53% in 2019)

Target 61% in 2021

**16k**

Tons of wastes in 2020 (19k in 2019)

Wastes  
+7 pts recycling versus 2019



**204**

GWh electricity in 2020 (231 in 2019)



**156**

GWh energy fuels in 2020 (184 in 2019)

Energy consumption  
-12,5% versus 2019



**605**

thousands cubic meters in 2020 (683 in 2019)

Water withdrawals  
-11,5% versus 2019



**6390**

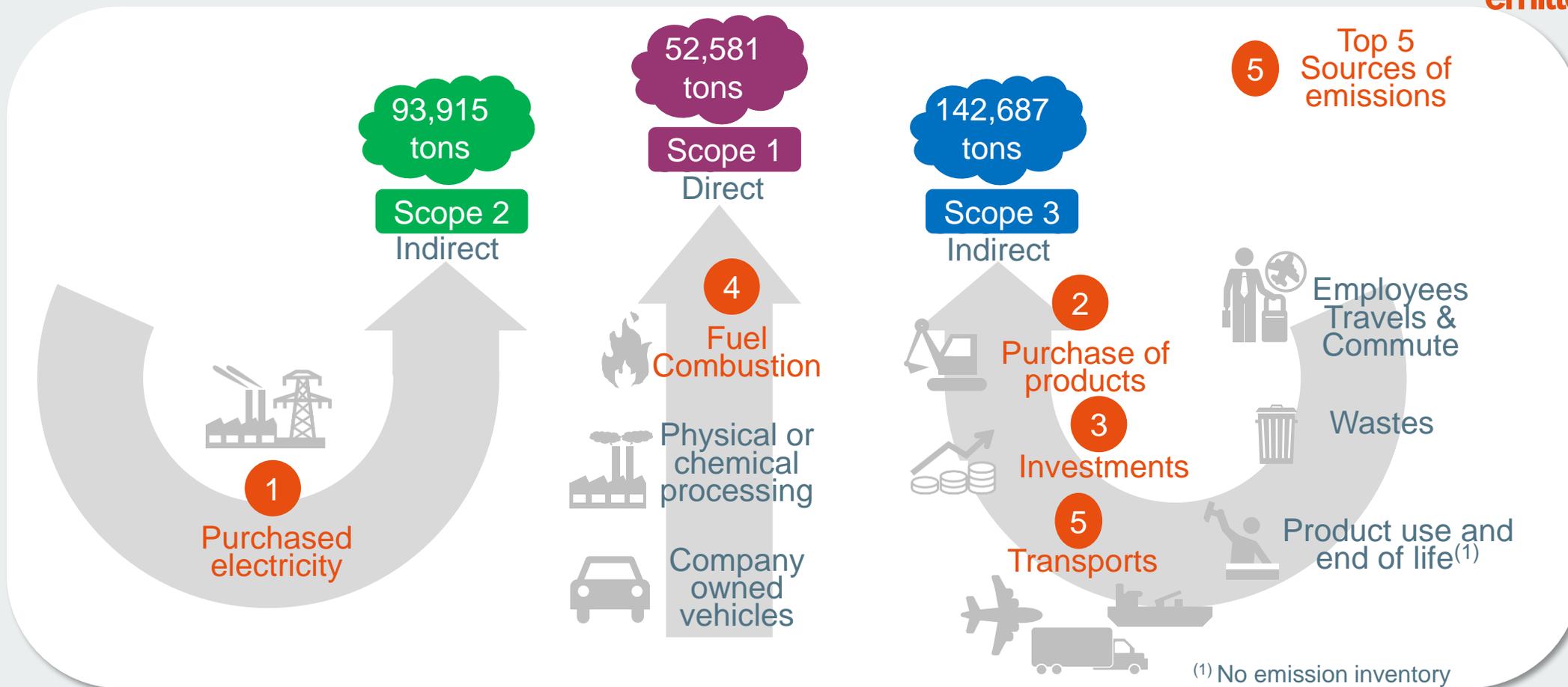
Hours of training in 2020 (6840 in 2019)

Environmental training  
-6,6% versus 2019

\* Covid context means less production, and less people trained

# Greenhouse gas emissions, The carbon footprint of the Group

289,000 tCO<sub>2</sub>e  
emitted in 2020\*



\* Covid context means less production, and less travel

# Key KPI on Human Capital (2020 results)



**91%**

of employees proud to be part of the Group

**Sense of belonging**  
+3 pts vs 2018



**92%**

Site managers with local nationality

**Cultural Diversity**  
+3 pts vs 2019



**24.2%**

Women engineers and professionals

Target 25 to 30% by 2022

**Gender Diversity**  
+1.2 pts vs 2019



**87%**

Human potential success rate

Target 88% in 2021

**Human Capital richness**  
+2 pts vs 2018



**10.9**

Hours of training per employee

**Training**  
-2.8h vs 2019



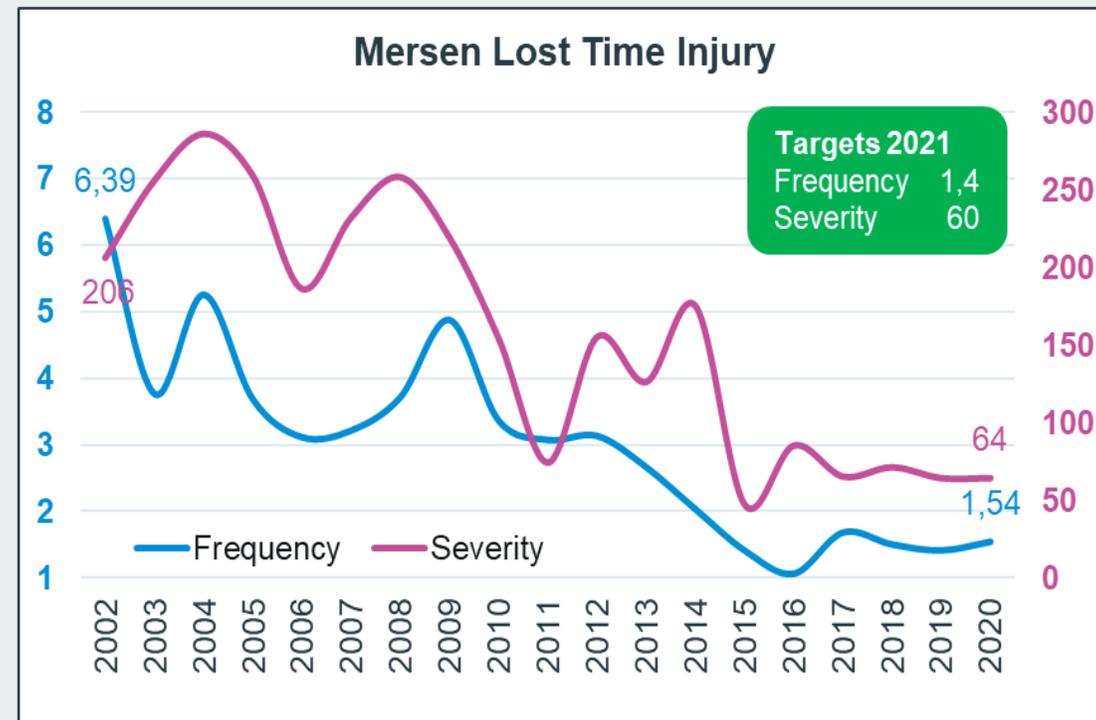
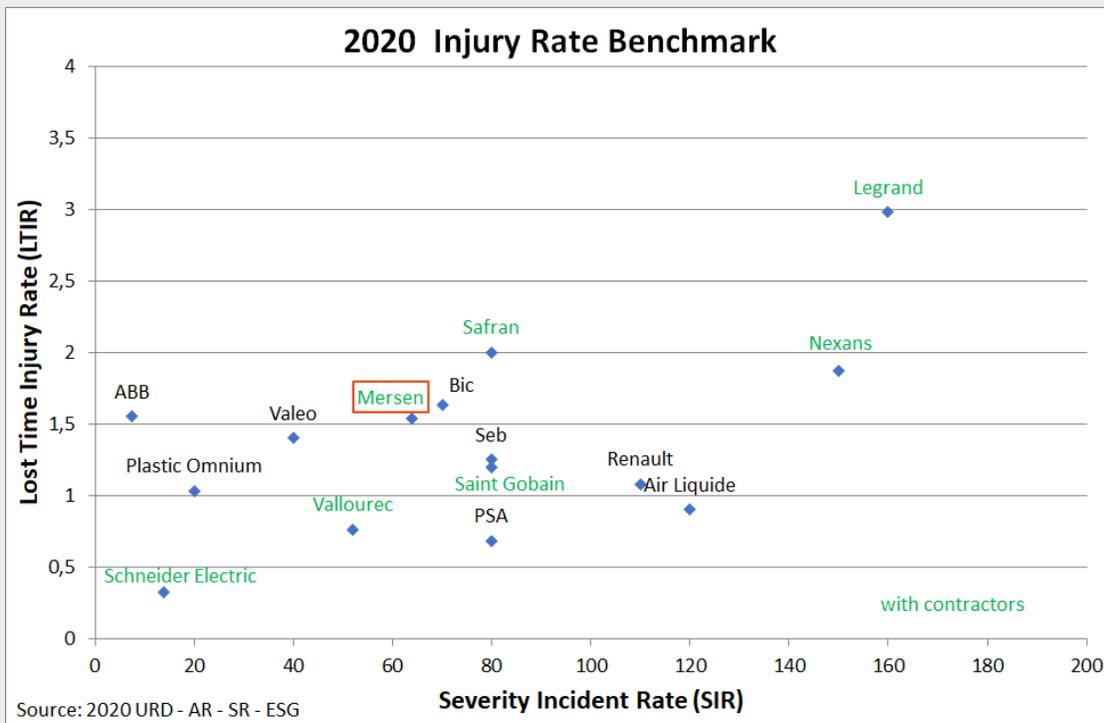
**69%**

Managers trained (Open Manger program)

Target 100% in 2021

**Training**  
+x pts versus 2019

# Safety: Mersen among the **best in class**



**Benchmark with the best practices**

Our training and prevention effort place us **in the first ranks**

**Strengthen our safety culture**

From a managed safety to **a behavioral safety**